

## CLAIMS

1. A process for decomposing a polymer into a monomer or oligomer by hydrolysis with sub- or supercritical water, characterized in that at least a part of the polymer is a polymer comprising a constitutional unit derived from an organic acid in the molecular structure, and the polymer being contacted with sub- or supercritical water in the presence of a water-insoluble base.

2. A process according to claim 1, wherein at least a part of the polymer is a polyester.

3. A process according to claim 1, wherein the polymer is a polyester having no chlorine in the molecular structure.

4. A process according to any one of claims 1 to 3, wherein the water-insoluble base has a solubility in the range of  $1.0 \times 10^{-4}$  to 0.5 g/100 g of water at 25°C.

5. A process according to any one of claims 1 to 4, wherein the water-insoluble base is selected from a compound of a metal of group II.

6. A process according to claim 5, wherein the water-insoluble base is selected from a Ca or Ba compound.

7. A process according to claim 6, wherein the water-insoluble base is selected from  $\text{CaCO}_3$ ,  $\text{BaCO}_3$  and  $\text{Ca(OH)}_2$ .